

# Reduce, Reuse, and Recycle

## REDUCE

REDUCE WASTE OR THE NEED TO RECYCLE BY NOT CREATING IT IN THE FIRST PLACE

## REUSE

REUSE MATERIALS BEFORE RECYCLING OR DISCARDING

## RECYCLE

TRANSFORM MATERIAL INTO ANOTHER USABLE MATERIAL

## TREATMENT

REDUCE VOLUME OR TOXICITY

## DISPOSAL

STORE OR BURY WASTE



### GREAT IDEA!

Clean Up Activities such as "Spring Cleaning" are good opportunities to reuse and recycle.

### BEST PRACTICE — "REDUCE"

First consider how to reduce your consumption of, and minimize the waste from, the materials you use at work and at home. When you "reduce," fewer items need to be produced and fewer raw materials, energy, water, and transportation are required.

#### Reduce

##### Optimize Efficiency

- Evaluate/ modify processes to minimize waste.
- Monitor chemical shelf life – use "first-in-first-out."
- Order new supplies/chemicals only when needed.

##### Minimize the Use of Paper

- Print and copy double-sided.
- Consider if a printed copy is necessary.

##### Stop the Junk Mail

- Reduce unsolicited mail by visiting:  
<http://www.dmaconsumers.org/cgi/offmailinglist#howto>

### NEXT CONSIDER – "REUSE"

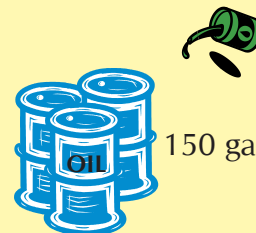
If you have "left over" materials determine if they can be reused in their current form rather than recycling or disposing of them.

#### Reuse

- Submit usable chemicals to the Chemical Exchange Program for use by others.
- Check Reapplication Services and the Chemical Exchange Program before purchasing new products.

- Easily reuse file folders by writing the subject title in pencil.
- Reuse previously printed paper as "scratch paper," or to print draft copies.

Sandia uses remanufactured toner cartridges. Each new toner cartridge requires about 3 quarts of oil. Buying a remanufactured toner cartridge or "tapping" the Toner Exchange program reduces Sandia's thirst for oil.  
<http://www-irm.sandia.gov/esh/p2/Toner.htm>



150 gallons saved

Over 150 gallons of oil, and \$65K in purchase costs, have been saved through toner cartridge reuse in barely six months of practice!

### THEN IF IT IS RECYCLABLE-

**"RECYCLE"** Recycling is a great practice; it should be done after the "reduce" or "reuse" option. Recycling takes usable materials and transforms those materials into a new product.

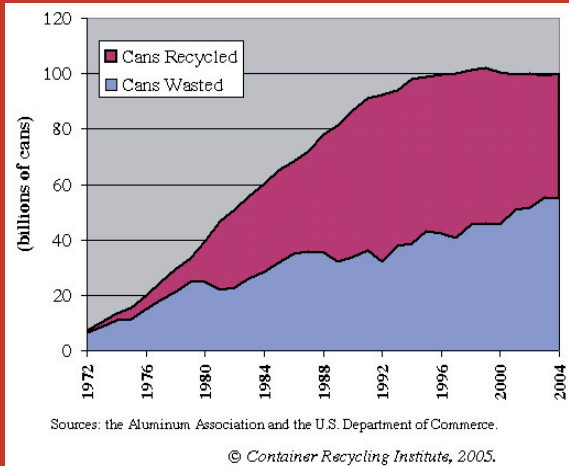


For additional EMS information, please visit:  
<http://EMS.sandia.gov>



# Reduce, Reuse, and Recycle

*Aluminum cans are excellent candidates for recycling because they can be made into an equivalent end product. However, statistics show we are increasingly “dumping” this opportunity:*



*America's recycling rate is the lowest in 24 years; U.S. threw away 1 trillion cans between 1972 and 2003, worth \$21B at today's market prices, and enough to circle the globe 3048 times.*

## PARTICIPATE IN RECYCLING PROGRAMS

**At work** – Please visit <http://www-irm.sandia.gov/esh/p2/recycling.htm> to learn what you can recycle and to know who to contact for additional questions.

**At home** – If you live in the City of Albuquerque you can recycle curbside –visit: <http://www.cabq.gov/solidwaste/curbreCY.html>.

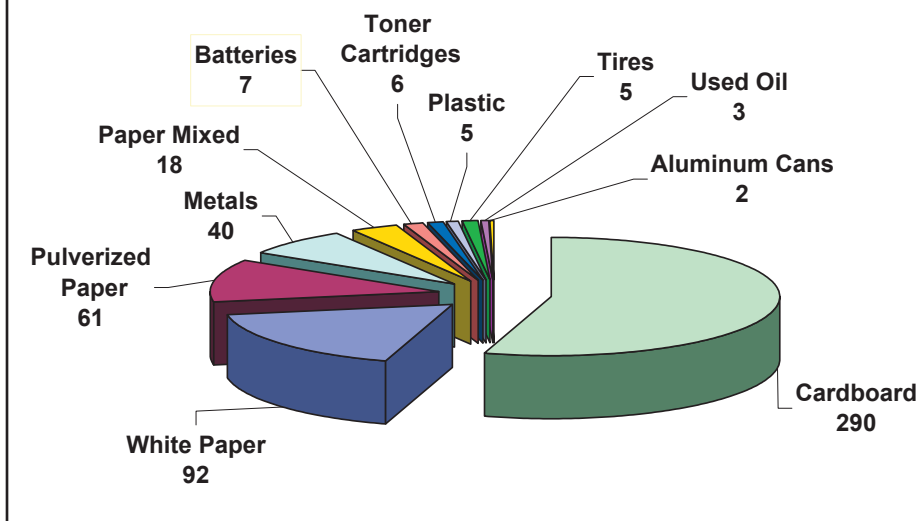
And if you live in an area that doesn't have curbside recycling you can take recyclables to one of twelve drop off locations:

<http://www.cabq.gov/solidwaste/dropoff.html>.

### Recycling one ton of aluminum cans saves:

- 54,000 kWh of electricity or 184.2 million BTUs of process & transportation energy
- 10 cubic yards of landfill space

### Materials Recycled from Routine Operations by SNL/NM in FY05 (Units in Tons)



### Recycling one ton of paper saves:

- 4,100 kWh of energy (enough to power an average home for 7-8 months)
- 7,000 gallons of water
- 17 mature trees
- 3 cubic yards of landfill space

For more information, contact Margie Marley at [mmarle@sandia.gov](mailto:mmarle@sandia.gov)

<http://www-irm.sandia.gov/esh/p2/recycling.htm>



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